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part of U.S. Patent Application Serial No. 09/513,783 filed February 25, 2000, now U.S. Patent No. 6,416,959.

Please replace the paragraph on page 66, lines 24-29 with the following paragraph:

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In a more preferred embodiment, the aminosilane is selected from the group consisting of methoxy or ethoxy silanes, which include but are not limited to trimethoxysilylpropyldiethylenetriamine, trimethoxysilylethylenediamine, aminopropyltriethoxysilane, trimethoxyaminopropylsilane, or chlorosilanes such as trichlorosilylethylenediamine, aminopropyltrichlorosilane. In a most preferred embodiment, the amino silane is trimethoxysilylpropyldiethylenetriamine.

Please replace the paragraph on page 80, lines 11-21 as originally filed with the following paragraph:

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Thus, in a preferred embodiment, the present invention results in a substrate with multiple types of differentiated cell types arranged in a pre-determined manner. The number of different cell types that can be arrayed is limited only by the differentiation potential of the stem cell, since the various cell binding locations can be individually addressed with differentiating agents, using devices including, but not limited to microspotters, and fluid delivery system such as, but not limited to those disclosed herein, and in U.S. Patent Nos. 5,858,188; and 6,007,690. Selective addressing of the stem cells with differentiating agents enables controlled differentiation into the progeny of choice. In a preferred embodiment, the fluid delivery system of the present invention is combined with the patterned cell substrate to produce a microfluidic cassette, which can deliver differentiating compounds to the patterned undifferentiated stem cells.

Please replace the paragraph on page 87, lines 1-4 as originally filed with the following paragraph:

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The use of a fluid delivery system in the method, including but not limited to that disclosed above, or the use of automated precision instruments such as microspotters, permits the delivery of specific cell binding locations with a differentiating agent of choice.